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<141> 2004-01-29

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Cys Arg Leu Ala Pro Leu Ile Gln Val Ile Leu Asp Cys Ser His Leu
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Tyr Asp Tyr Thr Val Lys Leu Leu Phe Lys Leu His Ser Cys Leu Pro
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Ala Asp Thr Leu Gln Gly His Arg Asp Arg Phe Met Glu Gln Phe Thr
65                  70                  75                  80

Lys Leu Lys Asp Leu Phe Tyr Arg Ser Ser Asn Leu Gln Tyr Phe Lys
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Arg Leu Ile Gln Ile Pro Gln Leu Pro Glu Asn Pro Pro Asn Phe Leu
            100                 105                 110

Arg Ala Ser Ala Leu Ser Glu His Ile Ser Pro Val Val Val Ile Pro
        115                 120                 125

Ala Glu Ala Ser Ser Pro Asp Ser Glu Pro Val Leu Glu Lys Asp Asp
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Leu Met Asp Met Asp Ala Ser Gln Gln Asn Leu Phe Asp Asn Lys Phe
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Asp Asp Ile Phe Gly Ser Ser Phe Ser Ser Asp Pro Phe Asn Phe Asn
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Ser Gln Asn Gly Val Asn Lys Asp Glu Lys Asp His Leu Ile Glu Arg
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Leu Tyr Arg Glu Ile Ser Gly Leu Lys Ala Gln Leu Glu Asn Met Lys
195 200 205

Thr Glu Ser Gln Arg Val Val Leu Gln Leu Lys Gly His Val Ser Glu
210 215 220

Leu Glu Ala Asp Leu Ala Glu Gln Gln His Leu Arg Gln Gln Ala Ala
225 230 235 240

Asp Asp Cys Glu Phe Leu Arg Ala Glu Leu Asp Glu Leu Arg Arg Gln
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Arg Glu Asp Thr Glu Lys Ala Gln Arg Ser Leu Ser Glu Ile Glu Arg
260 265 270

Lys Ala Gln Ala Asn Glu Gln Arg Tyr Ser Lys Leu Lys Glu Lys Tyr
275 280 285

Ser Glu Leu Val Gln Asn His Ala Asp Leu Leu Arg Lys Asn Ala Glu
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Val Thr Lys Gln Val Ser Met Ala Arg Gln Ala Gln Val Asp Leu Glu
305 310 315 320

Arg Glu Lys Lys Glu Leu Glu Asp Ser Leu Glu Arg Ile Ser Asp Gln
325 330 335

Gly Gln Arg Lys Thr Gln Glu Gln Leu Glu Val Leu Glu Ser Leu Lys
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Gln Glu Leu Ala Thr Ser Gln Arg Glu Leu Gln Val Leu Gln Gly Ser
355 360 365

Leu Glu Thr Ser Ala Gln Ser Glu Ala Asn Trp Ala Ala Glu Phe Ala
370 375 380

Glu Leu Glu Lys Glu Arg Asp Ser Leu Val Ser Gly Ala Ala His Arg
385 390 395 400

Glu Glu Glu Leu Ser Ala Leu Arg Lys Glu Leu Gln Asp Thr Gln Leu
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Lys Leu Ala Ser Thr Glu Glu Ser Met Cys Gln Leu Ala Lys Asp Gln
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Arg Lys Met Leu Leu Val Gly Ser Arg Lys Ala Ala Glu Gln Val Ile
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Gln Asp Ala Leu Asn Gln Leu Glu Glu Pro Pro Leu Ile Ser Cys Ala
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Gly Ser Ala Asp His Leu Leu Ser Thr Val Thr Ser Ile Ser Ser Cys
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Ile Glu Gln Leu Glu Lys Ser Trp Ser Gln Tyr Leu Ala Cys Pro Glu
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Asp Ile Ser Gly Leu Leu His Ser Ile Thr Leu Leu Ala His Leu Thr
            500                 505                 510

Ser Asp Ala Ile Ala His Gly Ala Thr Thr Cys Leu Arg Ala Pro Pro
        515                 520                 525

Glu Pro Ala Asp Ser Leu Thr Glu Ala Cys Lys Gln Tyr Gly Arg Glu
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Thr Leu Ala Tyr Leu Ala Ser Leu Glu Glu Glu Gly Ser Leu Glu Asn
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Ala Asp Ser Thr Ala Met Arg Asn Cys Leu Ser Lys Ile Lys Ala Ile
                565                 570                 575

Gly Glu Glu Leu Leu Pro Arg Gly Leu Asp Ile Lys Gln Glu Glu Leu
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Gly Asp Leu Val Asp Lys Glu Met Ala Ala Thr Ser Ala Ala Ile Glu
        595                 600                 605

Thr Ala Thr Ala Arg Ile Glu Glu Met Leu Ser Lys Ser Arg Ala Gly
    610                 615                 620

Asp Thr Gly Val Lys Leu Glu Val Asn Glu Arg Ile Leu Gly Cys Cys
625                 630                 635                 640

Thr Ser Leu Met Gln Ala Ile Gln Val Leu Ile Val Ala Ser Lys Asp
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Leu Gln Arg Glu Ile Val Glu Ser Gly Arg Gly Thr Ala Ser Pro Lys
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Glu Phe Tyr Ala Lys Asn Ser Arg Trp Thr Glu Gly Leu Ile Ser Ala
675 680 685

Ser Lys Ala Val Gly Trp Gly Ala Thr Val Met Val Asp Ala Ala Asp
690 695 700

Leu Val Val Gln Gly Arg Gly Lys Phe Glu Glu Leu Met Val Cys Ser
705 710 715 720

His Glu Ile Ala Ala Ser Thr Ala Gln Leu Val Ala Ala Ser Lys Val
725 730 735

Lys Ala Asp Lys Asp Ser Pro Asn Leu Ala Gln Leu Gln Gln Ala Ser
740 745 750

Arg Gly Val Asn Gln Ala Thr Ala Gly Val Val Ala Ser Thr Ile Ser
755 760 765

Gly Lys Ser Gln Ile Glu Glu Thr Asp Asn Met Asp Phe Ser Ser Met
770 775 780

Thr Leu Thr Gln Ile Lys Arg Gln Glu Met Asp Ser Gln Val Arg Val
785 790 795 800

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805 810 815

Leu Arg Lys Lys His Tyr Glu Leu Ala Gly Val Ala Glu Gly Trp Glu
820 825 830

Glu Gly Thr Glu Ala Ser Pro Pro Thr Leu Gln Glu Val Val Thr Glu
835 840 845

Lys Glu Ser Gln Thr Asn Thr Pro Tyr Val Ser Val Asn Pro Cys Tyr
850 855 860

Leu Ser Arg Val Cys Tyr Phe Pro Ser His Arg Pro Asn Pro Trp Ser
865 870 875 880

Pro Arg Gly Ser His Thr Thr Ala Ile Thr Gln Cys Arg Gly His Ala
885 890 895

His Phe Gln Arg Leu Pro Pro Arg His Pro Phe Cys Leu Asp Pro Trp
900 905 910

Ile Ser Thr Ala Ser Tyr Gly Gly Trp Leu Gly Phe Leu Val Leu Phe
915 920 925

Phe Phe Phe Lys Phe His Ser His Ser Gln Leu Ser Gln Arg Ala His
930 935 940

Pro Trp Gly Val Ser Arg Ala Pro Gln Leu Trp Leu Gln Arg Trp Cys
945 950 955 960

Cys Pro Gly Leu Ser Val Leu His Leu Arg Leu His Thr Asp Gln Val
965 970 975

Leu Ala His Pro Val His Ala Pro Gly Ser Gly Gly Ala Ala Glu Gln
980 985 990

Leu Ser Ser Lys Ser Arg Arg Arg Val Ser Ala Phe Pro Ser Ser Ile
995 1000 1005

Pro Ala Glu Ser Leu Cys Pro Pro Leu Gln Gly Arg Arg Gln Gln
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Lys Glu Gly Gln Glu Gly Ser His Ser Pro Val Pro Val Thr Arg
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Leu Lys Asn Leu Ile Thr Cys Leu Asn Gly Ala Gly Glu Ile Asn
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Asn Thr Thr Ser Leu Pro Glu Thr Val Arg Glu Trp Ser Leu Ser
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Ser Gly Pro Ser Pro Leu Ala Gln Arg Arg Ser Val Gly Val Ile
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Pro Asn Ser Phe Leu Gln Thr Ser Ala Leu Ala Ser Ser Ile Gly
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Arg Ser Phe His Leu Leu Arg Asn Gln Thr Arg Lys Ile Arg Cys
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Asn Cys Ser His Gln Gly Arg Thr Leu Tyr Leu Val Cys Tyr Pro
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Tyr Leu Leu Leu Thr Ser Leu Lys Gln Gln Gln Pro Thr Lys Arg
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Cys Leu Glu Gln Ser Glu Leu Gln Val Leu Gln Ser Ser Ser Phe
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Cys Pro Ala Thr Ser Ala Phe Lys Asn Gln Lys Lys Gly Gln Gly
1160 1165 1170

Ala Gly Leu Leu Leu Thr Trp Ile Pro Lys Gln Gly Asp His Leu
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Glu Leu Leu Gly Gln Arg Lys Glu Arg Thr Glu Pro Ala Ala Pro
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Thr Pro Phe Ser His Met Pro Gln Ala Leu Ala Ala Leu Trp Thr
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Gly Gly Gln Arg Ala His Glu Gln Leu Ala Arg Asp Gly Gln Pro
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Asn Ser Thr Phe Pro Leu Leu Asp Gly Pro Gln His Leu Ser Asp
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Leu Leu Ile Leu Gly Lys Gln Arg Leu Pro Ser Leu Ser Ile Ala
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Arg Pro Leu Glu His
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cgttagcgcc ggatccccgc gggtagggcg gggcgggcgg cgccgtgggg atcccggggc 180

agccgagggc ccctgactcg gctcctcgcg gcgacatgga tcggatggcc agctccatga 240

agcaggtgcc caacccactg cccaaggtgc tgagccggcg cggggtcggc gctgggctgg 300

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ccattaatac gcaggaaagt ggctgtaaag gaaaaacatg ccag 404